In the Claims:

- 1. (Currently amended) A method of detecting the presence or absence of invasive trophoblast cells in a biological sample comprising the steps of:
 - a. obtaining a biological sample from a patient;
 - b. measuring an the total amount of hCG in the biological sample;
 - c. measuring an amount of ITA in the biological sample; and
 - d. determining the percentage of the total amount of hCG that is ITA, and
 - e. wherein determining that invasive trophoblast cells are detected present in the sample if the percentage is 30% or greater.
- 2. (Original) The method of claim 1, wherein the hCG is a subunit of hCG.
- 3. (Original) The method of claim 2, wherein the subunit is α hCG or β hCG.
- 4. (Original) The method of claim 1, wherein the hCG is intact hCG.
- 5. (Original) The method of claim 1, wherein the hCG is total hCG.
- 6. (Original) The method of claim 1, wherein the patient is a woman previously diagnosed as having a gestational trophoblastic disease.
- 7. (Original) The method of claim 6, wherein the gestational trophoblastic disease is hydatidiform mole.
- 8. (Original) The method of claim 6, wherein the gestational trophoblastic disease is choriocarcinoma.
- 9. (Original) The method of claim 6, wherein the gestational trophoblastic disease is placeta-site trophoblastic tumor.
- 10. (Original) The method of claim 1, wherein the biological sample is urine, saliva, plasma or serum.
- 11. (Original) The method of claim 10 wherein the biological sample is urine.

- 12. (Original) A method of diagnosing quiescent gestational trophoblastic disease in a patient comprising the method of claim 1, wherein the patient has persistently low hCG titers, and, steps of:
 - a. obtaining a biological sample from a patient having persistently low hCG titers;
 - b. measuring the total amount of hCG in the biological sample;
 - c. measuring an amount of ITA in the biological sample;
 - d. determining the percentage of the total amount of hCG that is ITA, and
 - e. wherein diagnosing quiescent gestational trophoblastic disease is diagnosed in said patient if the percentage of hCG that is ITA determined in step (d) is less than 30%.
- 13. (Original) The method of claim 12, wherein the patient is a woman previously diagnosed as having a gestational trophoblastic disease.
- 14. (Original) The method of claim 13, wherein the gestational trophoblastic disease is hydatidiform mole.
- 15. (Original) The method of claim 13, wherein the gestational trophoblastic disease is choriocarcinoma.
- 16. (Original) The method of claim 13, wherein the gestational trophoblastic disease is placeta-site trophoblastic disease.
- 17-45. Cancelled.